1 Teresa M. Corbin (SBN 132360)
Denise M. De Mory (SBN 168076)
2 Ethan B. Andelman (SBN 209101)
Jaclyn C. Fink (SBN 217913)
3 HOWREY LLP
525 Market Street, Suite 3600
4 San Francisco, California 94105
Telephone: (415) 848-4900
5 Facsimile: (415) 848-4999

6 Attorneys for Plaintiff SYNOPSYS, INC.
and for Defendants AEROFLEX INCORPORATED,
7 AMI SEMICONDUCTOR, INC., MATROX
ELECTRONIC SYSTEMS, LTD., MATROX
8 GRAPHICS, INC., MATROX INTERNATIONAL
CORP., MATROX TECH, INC., and
9 AEROFLEX COLORADO SPRINGS, INC.

10   UNITED STATES DISTRICT COURT

11   NORTHERN DISTRICT OF CALIFORNIA

12   SAN FRANCISCO DIVISION

13

14 RICOH COMPANY, LTD.,   Case No. C03-04669 MJJ (EMC)

15   Plaintiff,   Case No. C03-02289 MJJ (EMC)

16   vs.   **DECLARATION OF ETHAN B.**
                                               ANDELMAN IN SUPPORT OF
17 AEROFLEX INCORPORATED, AMI   **OPPOSITION TO RICOH'S MOTION FOR**
SEMICONDUCTOR, INC., MATROX   **A PROTECTIVE ORDER RE SUBPOENAS**
18 ELECTRONIC SYSTEMS LTD., MATROX
GRAPHICS INC., MATROX   Judge: Hon. Edward M. Chen
19 INTERNATIONAL CORP., MATROX TECH,
INC., AND AEROFLEX COLORADO
20 SPRINGS, INC.

21   Defendants.
   SYNOPSYS, INC.,
22
            Plaintiff,
23
       vs.
24
   RICOH COMPANY, LTD.,
25
            Defendant.
26

27

28

DECLARATION OF ETHAN B. ANDELMAN

I, Ethan B. Andelman declare as follows:

1.   I am an attorney at the law firm of Howrey LLP, counsel of record for Synopsys and the Customer Defendants in the above-captioned action. I am a member in good standing of the State Bar of California and have been admitted to practice before this Court. I have personal knowledge of the facts set forth in this Declaration and, if called as a witness, could and would testify competently to such facts under oath.

2.   Attached hereto as Exhibit A is a true and correct copy of a letter from Ethan B. Andelman to Kenneth W. Brothers dated August 1, 2006.

3.   Attached hereto as Exhibit B are true and correct copies of excerpts of the deposition of Marios Papaefthymiou, taken in this case on August 11, 2006.

4.   Attached hereto as Exhibit C is a true and correct copy of the resume of Marios Papaefthymiou served with his expert reports on June 23, 2006.

5.   Attached hereto as Exhibit D are true and correct copies of correspondence between Howrey attorneys and attorneys for the University of Michigan regarding the subpoena served on the university on August 14, 2006.

6.   Attached hereto as Exhibit E are true and correct copies of correspondence between Howrey attorneys and attorneys for Yale University regarding the subpoena served on the university on August 14, 2006.

7.   Attached hereto as Exhibit F are true and correct copies of correspondence between Howrey attorneys and attorneys for the Massachusetts Institute of Technology regarding the subpoena served on the university on August 14, 2006.

8.   By agreement of the parties, expert discovery in this case other than depositions largely occurred informally. The parties agreed that expert document production would be informal, and would not even require explicit requests. The parties agreed that each expert would produce draft reports, time records, correspondence with counsel, and several other categories of documents voluntarily days after the expert reports were served.

1   9.   With regard to other categories, such as articles published by the experts and prior

2 expert testimony and reports, the parties agreed that they would informally request those materials, if

3 warranted, from the other side, and the materials would be produced if they were in the possession of

4 the expert. If the publications and prior testimony was not in the possession of the expert, the

5 requesting party could subpoena such information.

6   10.   Early on, the parties agreed that no expert depositions would be taken until after

7 responsive reports were served on July 24, 2006.

8   11.   In his expert report, Dr. Papaefthymiou opined on the nature of RTL and the inputs to

9 Design Compiler. The crux of Dr. Papaefthymiou's testimony is that the definition of RTL has

10 changed over time, so that the term means something very different today than it meant when the

11 patent issued.

12   12.   I have visited Dr. Papaefthymiou's website at http://www.eecs.umich.edu/~marios/

13 several times over the past couple of weeks. The links to the course pages noted at

14 http://www.eecs.umich.edu/~marios/courses.html have been nonfunctional the entire time I have

15 reviewed his site (and remain so to the present day).

16   Executed on August 22, 2006, at San Francisco, California.

17   I declare under penalty of perjury under the laws of the United States of America that the

18 foregoing is true and correct.

19

20   /s/ Ethan B. Andelman
                                                              Ethan B. Andelman
21

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HOWREY LLP

-2-

Case Nos. C03-4669 MJJ (EMC) and C03-2289 MJJ (EMC)
ANDELMAN DECLARATION   DM_US\8379994.v1

EXHIBIT A

HOWREY LLP

August 1, 2006

VIA PDF

Kenneth W. Brothers, Esq.
Dickstein Shaprio Morin & Oshinsky LLP
1825 Eye Street, NW
Washington, DC 20006

> **Re: *Synopsys v. Ricoh Company, Ltd.,***
> **Case No. C03-2289 MJJ (EMC)**
> ***Ricoh company, Ltd., v. Aeroflex, Inc., et al.***
> **Case No. C03-4669 MJJ (EMC)**

Dear Ken:

We are quickly reaching an untenable situation with expert depositions. The parties agreed to conduct all expert depositions after all reports were served on July 24 and before the close of expert discovery on August 18, a span of four work weeks. Yet Ricoh has failed to provide a date for the deposition of any of its experts prior to the last week and a half of this period. Of the eleven expert depositions that need to be scheduled, it now appears that at least seven will occur in the last week of discovery. Given that the deadlines for expert depositions has been known for quite some time, the inability of any of your experts to be available for deposition this week or next is (at best) extremely poor planning on your part, and will certainly cause us extreme prejudice as we attempt to prepare our dispositive motions (which are also due on August 18). Moreover, taking depositions in the days before the deadline will mean, as a practical matter, that some of the significant questions we intend to pose to your experts will not be available to be used in our motions, and we may be forced to go through the cumbersome and inefficient process of supplementation in order to avoid substantive prejudice.

Moreover, you have insisted on all of your experts being deposed on the East Coast, causing the schedule to be even more biased in Ricoh's favor. Specifically, you have refused our requests that Mr. Colaianni (who resides in DC) and Dr. Soderman (who lives locally in the Bay Area) be produced in San Francisco. This is unacceptable, especially when we have indicated our willingness to allow our experts to be deposed on the East Coast. Unless Dr. Soderman is produced in San Francisco for his two days of discovery next week, we will produce all of our witnesses (with the exception of Dr. Kowalski) in San Francisco. With the cross-country travel involved for the attorneys on both sides, such an arrangement would be burdensome on all parties, and would make it essentially impossible to complete all discovery by the August 18 cutoff. (Please note that, other than for Mr. Wagner, we are unwilling to extend the discovery cutoff.)

You said you would investigate whether Dr. Papaefthymiou was available this week for deposition, which you do not appear to have done. If Dr. Papaefthymiou is not available for

Kenneth W. Brothers, Esq.
August 1, 2006
Page 2

deposition this week (in any location), and is otherwise not available until August 16 (as you told me last Friday), we request he be made available on the 16th in DC. We will make Dr. Casavant available only after both Dr. Soderman and Dr. Papaefthymiou are deposed.

Unfortunately, Mr. Van Horn is only available the 15th-17th for deposition, so we will have to place his deposition on the calendar for the week of the 14th. If you are still offering Colaianni on the 11th, we will produce Van Horn on the 15th. If you wish to postpone Colaianni until after Van Horn, we are agreeable to the 15th and 16th for Van Horn and Colaianni, respectively.

I had told you on Friday that Mr. Wagner could be deposed the week of the 21st. He is available on the 22nd (but not the 21st). Please let us know if this is acceptable

As to Dr. Mitchell, if you cannot take his deposition on August 4, as you state, he is available on August 3 in Pittsburgh. If you wish to take his deposition on August 3, we will need to know no later than 5 PM Pacific time today, so we can arrange travel. We cannot offer Dr. Mitchell the week of the 14th because there are at least seven depositions that will take place that week. Although we have substantial resources dedicated to this case (as do you), we do not have the capacity to prepare to take five depositions and defend three depositions in a five-day span, especially when those depositions are highly technical expert depositions. Furthermore, there is simply no reason to do so -- Ricoh agreed that the first week of August would be an acceptable period for taking expert discovery, and it should be prepared to do so.

To help relieve some of the time pressure your proposed expert discovery schedule creates, we note that there are a few days' play in the dispositive motion schedule. With a hearing on September 26, the normal 5 weeks' notice date is August 22. Are you willing to stipulate to a change in the ordered schedule so that motions are filed on August 22, oppositions are filed on September 5, and replies are due September 12? Further, will you produce Dr. Soderman in San Francisco next week for his two days of deposition? If you are unwilling to agree to both of these requests -- requests that are eminently reasonable given the schedule you have proposed -- we will have to raise the matter with Judge Chen in the next couple of days. We are, of course, willing to listen to any proposals you have, but fitting in seven or eight days of expert deposition in 5 business days, as you have proposed, is simply not a reasonable schedule.

Finally, we have obtained the availability of USC for deposition -- either August 9 or August 15 in South Carolina. Given how the week of the 14th is shaping up, we prefer the 9th. Are you agreeable to that date?

Sincerely,

Ethan B. Andelman

EBA:sg

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EXHIBIT B

Page 1

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 1                 UNITED STATES DISTRICT COURT

 2              NORTHERN DISTRICT OF CALIFORNIA

 3                  SAN FRANCISCO DIVISION

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 5       - - - - - - - - - - - - - -x

 6   RICOH COMPANY, LTD.,            :

 7              Plaintiff,           :

 8       vs.                        :   Case No.

 9   AEROFLEX INCORPORATED,          :   C-03-4669-MJJ (EMC)

10   et al.,                         :

11              Defendants.          :

12   _____         :

13   SYNOPSYS, INC.,                 :

14              Plaintiff,           :   Case No.

15       vs.                        :   C-03-289-MJJ (EMC)

16   RICOH COMPANY, LTD.,            :

17              Defendant            :

18       - - - - - - - - - - - - - -x

19

20       VIDEOTAPE DEPOSITION OF MARIOS PAPAEFTHYMIOU

21

22                            Washington, DC

23                            Friday, August 11, 2006

24

25     REPORTED BY:   ERIN AVERY, RPR
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Page 51

 1   any ASIC design today that is described in a

 2   hardware description language is RTL?

 3   MS. ALLEN: Objection; misstates prior

 4   testimony.

 5   THE WITNESS: I would have to think about

 6   this. This is not something I have a conclusive

 7   opinion.

 8   BY MS. DE MORY:

 9   Q   Do you teach courses in ASIC design --

10   relating to ASIC design?

11   A   I teach courses that touch ASIC design.

12   Q   Have you ever taught courses that are

13   directly related to ASIC design?

14   A   I've been teaching a logic synthesis

15   course at the University of Michigan on and off for

16   the past 10 years.

17   Q   In the context of the logic synthesis

18   course that you teach at the University of Michigan,

19   does the subject of RTL come up?

20   A   We certainly mention RTL.

21   Q   And in the context of the logic synthesis

22   course that you teach at the University of Michigan,

23   do you define RTL?

24   A   We do not go into specific definitions

25   about terms that do not have a permanent meaning.

Page 52

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 1    We mention RTL as a way to describe hardware

 2    systems, and we focus on algorithms.

 3         Q    Algorithms that can be classified as RTL?

 4         A    No, algorithms that are used to perform

 5    logic synthesis.

 6         Q    In terms of the inputs to logic synthesis,

 7    do you discuss RTL in that context in the courses

 8    that you teach at the University of Michigan on

 9    logic synthesis?

10         A    The input itself is not the focus.  We

11    talk about several kinds of algorithms and about the

12    kinds of inputs that the algorithms would expect.

13         Q    And is one of those kinds of inputs that

14    you talk about RTL inputs?

15         A    Yes, you could put it like that.  I'm not

16    sure we put it in as explicit terms during a

17    lecture, but you could say that.

18         Q    Would it be accurate to say that logic

19    synthesis tools today -- strike that.

20              When you discuss logic synthesis in the

21    context of your -- strike that.

22              When you discuss RTL or mention RTL in the

23    context of your logic synthesis courses at the

24    University of Michigan, do you offer any meaning as

25    to what RTL is?
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Page 53

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 1        A    I try to give examples.  I explain some of

 2    the issues with the terminology, and we just leave

 3    it there.

 4        Q    And when you say some of the issues with

 5    the terminology, what do you mean?

 6        A    Such as the fact that the term RTL has

 7    varied.  The meaning of the term has not stayed

 8    fixed over time.  And the structural RTL from the

 9    '70s, from the'80s, the more high-level constructs,

10    functional RTL, the '90s, and the more, you know,

11    generic use of the term nowadays to describe

12    descriptions of hardware systems.

13        Q    Including ASICs?

14        A    Including ASICs.

15        Q    And do you have an understanding of when

16    the term is used generically today to describe

17    descriptions of hardware systems, what makes that

18    description RTL?

19             MS. ALLEN:  Objection; compound, vague and

20    ambiguous.

21             THE WITNESS:  You're talking about today,

22    nowadays?

23             BY MS. DE MORY:

24        Q    Correct.

25        A    The fact that you are describing a
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Page 54

1   hardware system would leave one -- would lead one to

2   use the term RTL to refer to the description.

3   Q   So all descriptions of hardware cells

4   today that are written in a hardware description

5   language for input into logic synthesis tools can be

6   referred to as RTL?

7   MS. ALLEN: Objection; compound, misstates

8   prior testimony.

9   THE WITNESS: You used the term hardware

10   cells, and I'm not sure what you mean by that.

11   BY MS. DE MORY:

12   Q   Did I? That was a mistake. I'm sorry.

13   Thank you for catching it.

14   Is it your testimony that all descriptions

15   of hardware systems today that are written in

16   hardware description languages for input into logic

17   synthesis tools can be referred to as RTL?

18   MS. ALLEN: Objection; compound, vague and

19   ambiguous.

20   THE WITNESS: They could be referred to as

21   RTL.

22   BY MS. DE MORY:

23   Q   And is it your testimony that generally

24   speaking today, all descriptions of hardware systems

25   today that are written in hardware description

EXHIBIT C

Marios Christos C. Papaefthymiou

Address

University of Michigan
Department of Electrical Engineering
and Computer Science
Ann Arbor, Michigan 48109-2122

Phone: (734) 764-3184
Fax: (734) 763-4617
e-mail: marios@eecs.umich.edu

Technical Interests

Energy-efficient high-performance computer systems, computer-aided design, VLSI, design and analysis of algorithms, parallel and distributed computation.

Professional Experience

UNIVERSITY OF MICHIGAN

Professor of Electrical Engineering and Computer Science, September 2005–present.

Associate Professor of Electrical Engineering and Computer Science, September 1999–August 2005.

Assistant Professor of Electrical Engineering and Computer Science, September 1996–August 1999.

Director, Advanced Computer Architecture Laboratory, September 2000–present.

YALE UNIVERSITY

Assistant Professor of Electrical Engineering and Computer Science, July 1993–August 1996.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Research Assistant, MIT Laboratory for Computer Science, September 1988–August 1993.

Teaching Assistant for graduate and undergraduate-level courses on Computer System Architecture and Algorithms. Teaching Assistant for the course "Parallel Algorithms and Architectures" taught during the MIT Summer Session and at Thinking Machines Corp.

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Ph.D. in Electrical Engineering and Computer Science, September 1993.

Thesis title: *"A Timing Analysis and Optimization System for Level-Clocked Circuitry"*

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

S.M. in Electrical Engineering and Computer Science, September 1990.

Thesis title: *"On Retiming Synchronous Circuitry and Mixed-Integer Optimization"*

CALIFORNIA INSTITUTE OF TECHNOLOGY

B.S. in Electrical Engineering, June 1988. Ranked first in entire graduating class.

Thesis title: *"A Real Time Trajectory Planner with Obstacle Avoidance for Robot Arm Manipulators"*

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

Department of Electrical Engineering, Freshman and Sophomore year, September 1984 – June 1986. Ranked fourth in the nation-wide entrance examinations of the Department, June 1984.

Awards and Distinctions

EECS Department Outstanding Achievement Award, University of Michigan, January 2002.

First prize, VLSI Design Contest (Operational Category), 38th ACM/IEEE Design Automation Conference, June 2001.

Arthur Greer Memorial Prize for research in computer systems and achievements in the Electrical Engineering Department, Yale College, June 1996.

Career Award, National Science Foundation, February 1996.

Best Paper Award, 32nd ACM/IEEE Design Automation Conference, June 1995.

Young Investigator Award, US Army Research Office, June 1995.

Highest GPA in graduating class, Caltech, June 1988.

Caltech Carnation Merit Award, June 1987.

Caltech Undergraduate Research Fellowship, June 1987.

Merit Award, Hellenic Ministry of Education, June 1986, June 1985, and June 1984.

Graduated Ph.D. Students

1. Joohee Kim, Ph.D. in Electrical Science and Engineering (VLSI), U. Michigan, August 2004.
   Thesis title: *"Low Energy Memory Design"*

2. Conrad Ziesler, Ph.D. in Electrical Science and Engineering (VLSI), U. Michigan, April 2004.
   Thesis title: *"Energy Recovering Pipelines"*

3. Xun Liu, Ph.D. in Electrical Science and Engineering (VLSI), U. Michigan, August 2003.
   Thesis title: *"Power Estimation for IP-Based Design Using Analytical Macromodeling"*

4. Suhwan Kim, Ph.D. in Electrical Science and Engineering (VLSI), U. Michigan, April 2001.
   Thesis title: *"True Single-Phase Adiabatic Circuitry for High-Performance Low-Energy VLSI"*

5. Sangjin Hong, Ph.D. in Electrical Science and Engineering (VLSI), U. Michigan, December 1999.
   Thesis committee co-chaired with Prof. Wayne Stark.
   Thesis title: *"Performance-Driven VLSI System Design for Low Energy Wireless Communications"*

6. Fang Wang, Ph.D. in Computer Science, Yale U., January 1998.
   Thesis title: *"Dynamic Processor Management for Multiprogrammed Parallel and Distributed Systems"*

7. Kumar Lalgudi, Ph.D. in Electrical Engineering, Yale U., January 1997.
   Thesis title: *"Architectural-Level Design of High-Performance Energy-Efficient VLSI Systems"*

Graduated M.S. Students

1. Michael Rykov, M.S. in Computer Science and Engineering, U. Michigan, December 2004.
2. Namit Kumar, M.S. in Electrical Science and Engineering, U. Michigan, April 2003.
3. Christos Pateropoulos, M.S. in Electrical Science and Engineering, U. Michigan, April 2003.
4. Tarun Gupta, M.S. in Computer Science and Engineering, U. Michigan, April 2002.
5. Sashi Athota, M.S. in Computer Science and Engineering, U. Michigan, December 2001.
6. Shin-han Kim, M.S. in Computer Science and Engineering, U. Michigan, April 2001.

7. Spyridon Voulgaris, M.S. in Computer Science and Engineering, U. Michigan, April 1999.
8. Daniel Pilcher, M.S. in Electrical Science and Engineering, U. Michigan, December 1998.
9. Micah Knapp, M.S. in Electrical Engineering, Yale U., June 1996.

Current Graduate Students

1. Jiyoun Kim (candidate, Ph.D. expected May 2006)
2. Juang-Ying Chueh (candidate, Ph.D. expected August 2006)
3. Visvesh Sathe (candidate, Ph.D. expected December 2006)
4. Sujay Phadke
5. Jerry Kao

Inventions

- Low-power SRAM with energy recovery. File No. 2300, University of Michigan Technology Transfer Office, March 2002. US Provisional Patent Application, April 2002.
- Single phase resonant clock generator for energy recovering systems, Invention Disclosure No. 2299, University of Michigan Technology Transfer Office, March 2002. US Provisional Patent Application, April 2002.
- Low-power flip-flop with energy recovery and automatic clock gating. Invention Disclosure No. 2270, University of Michigan Technology Transfer Office, March 2002. US Provisional Patent Application, April 2002.
- GeoPart: A geometric partitioner for 2-weighted placed graphs. Invention Disclosure No. 2454, University of Michigan Technology Transfer Office, August 2002.
- A Markov chain sequence generator. Invention Disclosure No. 2452, University of Michigan Technology Transfer Office, August 2002.
- Analytical Macromodeling Methodology for High-Level Power Estimation. Invention Disclosure No. 1759, University of Michigan Technology Management Office, August 1999.
- True Single-Phase Adiabatic Logic. Invention Disclosure No. 1496, University of Michigan Technology Management Office. US Provisional Patent Application, August 1998.

Patents

- Low-power driver with energy recovery. US Patent No. 6,879,190, April 2005.
- Low-power CMOS flip-flop. US Patent No. 6,777,992, August 2004.
- Method and apparatus for generating a clock signal. US Patent No. 6,742,132, May 2004.

Invited Presentations and Tutorials

- "Energy Recovery Computers." Tutorial, 2003 SoC Conference, Portland, Oregon, September 2003.
- "Energy-Efficient VLSI Architectures." Invited presentation, CMOS Forum, IBM Research, April 2002.
- "Retiming Theory and Practice." Invited presentation, 10th IFIP International Conference on VLSI, Lisbon, Portugal, December 1999.

- "CAD for Embedded Systems." Tutorial, 1999 VLSI Design Conference, Goa, India, January 1999.

Invited Seminars

AT&T Bell Laboratories, California Institute of Technology, Columbia University, Dartmouth College, Digital Equipment Corporation, IBM Research, IBM Design Automation (East Fishkill), Sun Research Labs, Intel Corporation, Intel Circuits Research Lab, Motorola Research Labs, National Technical University of Athens, NEC Research Institute, University of California at Berkeley, University of Michigan, University of Rochester, University of Southern California, University of Utah, University of Washington, Yale University.

Professional Service

Department

- Director, Advanced Computer Architecture Laboratory, EECS Department, September 2000–present (on sabbatical during 2003–04).
- Chair, Department Computer Organization Committee, EECS Department, September 2004–present.
- Chair, Reappointment Committee for Prof. Igor Markov, Winter 2003.
- Chair, Computer Engineering Program Committee, 2000–2001.
- Member, Executive Committee, CSE Division, 2001–2002.
- Director, Computer Engineering Committee, 2001–2003.
- Member, EECS Curriculum Committee, 2001–2002.
- Chair, EECS Web Committee, 2001–2002.
- Member, CSE Building Committee, 2002–2003.
- Financial Aid Chair, Graduate Committee, CSE Division, 1998–2001.

Profession

- Associate Editor, *IEEE Transactions on VLSI*, January 2001–present.
- Associate Editor, *IEEE Transactions on Computers*, July 1999–2003.
- Associate Editor, *IEEE Transactions on Computer-Aided Design of Integrated Circuits*, July 1997–2003.
- Associate Editor, *Journal of Circuits, Systems, and Computers*, June 2002–present.
- Chair, Technical Program Subcommittee on Timing Analysis, *IEEE/ACM International Conference on Computer-Aided Design*, November 1998, Santa Clara, California.
- General Chair, *TAU'97 International ACM/IEEE Workshop on Timing Issues in Digital Systems*, December 1997, Austin, Texas.
- Program Committee Chair, *TAU'95 International ACM Workshop on Timing Issues in Digital Systems*, November 1995, Seattle, Washington.

- Director, *1996 Frontiers of Science and Engineering.* Outreach program at Yale University that aims at promoting science and engineering research among high-school students.
- Program Committee Member:

  - *ARVLSI: Conference on Advanced Research in VLSI:* March 2001 and September 1997.
  - *TAU: International ACM/IEEE Workshop on Timing Issues in Digital Systems,* March 1999, December 2000, and December 2002.
  - *PATMOS: European Workshop on Power and Timing Modeling and Simulation,* 1999, 2000, 2001, 2002, 2003, and 2004.
  - *ICCAD: IEEE/ACM International Conference on Computer-Aided Design,* November 1996, 1997, and 1998.
  - *ISVLSI: IEEE International Symposium on VLSI,* February 2002.
  - *International Workshop on Clock Distribution Networks–Design, Synthesis, and Analysis,* October 1997.
  - *International Symposium on VLSI Technology, Systems, and Architectures,* June 1997 and 1995, Taipei, Taiwan.
  - *1997 Great Lakes Symposium on VLSI,* March 1997.
  - *10th International Conference on VLSI Design,* January 1997, Hyderabad, India.

- Organizing Committee Member, 1995 NECUSE Workshop on parallel computing curriculum development, March 1995, Wellesley, Massachusetts.
- Referee for the journals: *Journal of the Association for Computing Machinery, Journal of Parallel and Distributed Computing, Journal of Supercomputing, Algorithmica, Mathematical Systems Theory, IEEE Transactions on Computer-Aided Design of Integrated Circuits, IEEE Transactions on Computers, IEEE Transactions on VLSI Systems, IEEE Transactions on Circuits and Systems, IEEE Transactions on Parallel and Distributed Systems, International Journal of High-Speed Electronics and Systems, Integrated Computer-Aided Engineering.*
- Proposal reviewer and panelist for the National Science Foundation and the US Army Research Office.

Research Grants

PI/PD for Single-Investigator Grants

1. "Design Technologies for Energy-Efficient Very Large-Scale Integration (VLSI) Systems"
   US Army Research Office, August 2003–July 2006
   $485,000
2. "Complexity Management of Placement-Driven Synthesis through Multi-Constrained Design Partitioning"
   Semiconductor Research Corporation, October 2000–September 2003
   $150,000
3. "Adaptive Information Processing through Precomputation"
   National Science Foundation, September 2000–August 2005
   $500,000
4. "Low-Energy VLSI Circuit Architectures"
   US Army Research Office, August 1999–July 2002
   $315,000

5. "Multi-Constrained Design Partitioning for Parallel and Distributed Placement-Driven Synthesis"
   Partnership Award, IBM Corporation, July 1999–June 2001
   $80,000

6. "Resource Management in Parallel and Distributed Multiprogrammed Systems"
   Partnership Award, IBM Corporation, July 1997–June 1998
   $30,000

7. "High-Speed Low-Power VLSI Systems"
   AASERT Award, US Army Research Office, June 1997–May 2001
   $150,000

8. "Parallel Integer Programming for VLSI"
   Career Award, National Science Foundation, February 1996–January 2001
   $200,000

9. "Technologies for Low-Power VLSI Design"
   Young Investigator Award, US Army Research Office, June 1995–July 1999
   $150,000

PI/PD or co-PI for Multi-Investigator Grants

1. "Charge Recovery Technology Evaluation"
   Cyclos Semiconductor, July 2005–June 2006
   $100,000
   Participation as co-PI ($100,000 subaward), with Karem Sakallah (U. Michigan) as PI/PD.

2. "Advanced Brain-Machine Interfaces"
   Defense Advanced Research Projects Agency, July 2002–August 2004
   $3,300,000
   Participation as co-PI ($610,000 subaward), with Daryl Kipke (U. Michigan) as PI/PD.

3. "Synchronous VLSI Circuit Optimization via Integrated Retiming and Clock Skew Scheduling"
   National Science Foundation, June 1997–May 2001
   $370,000
   Participation as PI/PD ($190,000 subaward), with Eby Friedman (U. Rochester) as co-PI.

PI/PD or co-PI for Equipment Grants

1. "ACAL Simulation Pool"
   Intel Coporation, September 2002–May 2004
   $300,000
   Participation as PD, with all ACAL faculty as co-PIs.

2. "A Platform for Research in Distributed Algorithms for Computer-Aided Design"
   Research Instrumentation Award, National Science Foundation, June 1994–August 1995
   $70,000
   Participation as co-PI, with Debashis Bhattacharya as PI/PD.

Publications List

Publications in Refereed Conference, Symposium, and Workshop Proceedings

1. J. Kim, M. C. Papaefthymiou, and J. L. Neves. Parallelizing post-placement timing optimization. In *Proceedings of the 18th International Parallel and Distributed Processing Symposium*, April 2006.

2. V. Sathe, J.-Y. Chueh, and M. C. Papaefthymiou. A 1.1GHz charge recovery logic. In *International Solid-State Circuits Conference*, February 2006.

3. V. Sathe, C. Ziesler, and M. C. Papaefthymiou. GHz-class charge recovery logic. In *International Symposium on Low-Power Electronics and Design*, August 2005.

4. V. Sathe, J.-Y. Chueh, J. Kim, C. Ziesler, S. Kim, and M. C. Papaefthymiou. Fast, efficient, recovering, and irreversible. In *1st Workshop on Reversible Computing* of the 2005 ACM Computing Frontiers Conference, May 2005.

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1. H. Berryman, J. Narem, G. Davison, and M. C. Papaefthymiou. Image compression for high-performance computing. *NASA Tech Briefs*, Vol. 22, No. 4, pp. 42–43, April 1998.

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1. M. C. Papaefthymiou and J. Rodrigue. Implementing parallel shortest-paths algorithms. *Parallel Algorithms*, S. N. Bhatt (ed.), DIMACS Series in Discrete Mathematics and Theoretical Computer Science, American Mathematical Society, Vol. 30, pp. 59–68, 1997.

2. F. Wang, M. C. Papaefthymiou, and M. Squillante. Performance evaluation of gang scheduling for parallel and distributed multiprogramming. *Job Scheduling Strategies for Parallel Processing*, D. G. Feitelson and L. Rudolph (eds.), Springer-Verlag LNCS Vol. 1291, pp. 277–298, 1997.

3. F. Wang, H. Franke, M. C. Papaefthymiou, P. Pattnaik, L. Rudolph, and M. Squillante. A gang scheduling design for multiprogrammed parallel computing environments. *Job Scheduling Strategies for Parallel Processing*, D. G. Feitelson and L. Rudolph (eds.), Springer-Verlag LNCS Vol. 1162, pp. 111–125, 1996.
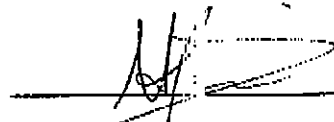
Theses

1. "A timing analysis and optimization system for level-clocked circuitry". Ph.D. thesis, MIT Laboratory for Computer Science Technical Report TR-605, September 1993.

2. "On retiming synchronous circuitry and mixed-integer optimization". Master of Science thesis, MIT Laboratory for Computer Science Technical Report TR-486, September 1990.

3. "A real time trajectory planner with obstacle avoidance for robot arm manipulators". Bachelor of Science thesis, California Institute of Technology, June 1988.

Course Digests

1. M. C. Papaefthymiou. Computer Systems. Undergraduate-level course on computer system organization introduced at Yale University, June 1995. Course material includes an instructional RISC microprocessor implemented in Verilog.

2. M. C. Papaefthymiou. Computer-Aided Design of Integrated Circuits. Graduate-level course on electronic design automation introduced at Yale University, June 1994.

3. M. X. Goemans and M. C. Papaefthymiou. Advanced Algorithms. Lecture notes for the MIT graduate-level advanced algorithms course, MIT Laboratory for Computer Science Research Seminar Series RSS-12, March 1991.

The following statement accurately captures my statement regarding all present and prior relationships with any entity directly or indirectly involved in the present *Synopsys v. Ricoh Company, Ltd.* and *Ricoh Company, Ltd. v. Aeroflex, Inc., et al.* matters:

I previously was engaged as a consultant by Magma Design Automation, Inc. ("Magma"). Although I have not been engaged by Magma to perform consulting work either in the past five years or during the pendency of the *Synopsys, Inc. v. Magma* No. C-04-3923 MMC, litigation, I was subpoenaed and deposed by Synopsys approximately one year ago in the *Synopsys v. Magma* litigation.
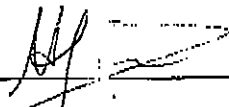
_____

Marios Christos C. Papaefthymiou, PhD.
University of Michigan
Department of Electrical Engineering
and Computer Science
Ann Arbor, Michigan 48109

5/31/06

Date

The following statement accurately captures my statement regarding my employment, expert or consulting engagements within the past five years:

My curriculum vitae accurately reflects all of my employment, expert and consulting engagements within the past five years with the exception of one confidential consultation. I was engaged as a consultant (not as a testifying expert) in connection with a litigation matter for which the terms of my engagement require me to not reveal the names of the parties to the litigation. The matter relates to chipsets for buses, and does not involve ASIC design processes. The matter does not involve any of the parties to the present *Synopsys v. Ricoh Company, Ltd.* or *Ricoh Company, Ltd. v. Aeroflex, Inc., et al.* matters.

_____   5/31/06
_____   _____
Marios Christos C. Papaefthymiou, PhD.   Date
University of Michigan
Department of Electrical Engineering
and Computer Science
Ann Arbor, Michigan 48109

EXHIBIT D

Andelman, Ethan

From:	Donica Varner [dvarner@umich.edu]
Sent:	Friday, August 18, 2006 12:26 PM
To:	Greinert, Matthew
Cc:	Kris Snook
Subject:	Synopsys v Ricoh Company, Ltd et al

Follow Up Flag:	Follow up
Due By:	Saturday, August 19, 2006 10:00 AM
Flag Status:	Red

Dear Mr. Greinert:

I am writing in follow-up to our conversation regarding the subpoena for documents that
you caused to be served on the University of
Michigan.   Ms. DeAnna Allen, from the firm Dickstein Shapiro, has
advised that her firm has filed a motion for protective order and that the Court has
entered an order staying the subpoena return date
by seven days.   Please confirm.

The University of Michigan is committed to complying with its legal obligations with
regard to the subpoena. I, however, would kindly suggest that you may be successful if
you would contact Ms. Allen's firm regarding your request and seeking this information
directly from Dr. Papaefthymiou, through his retained counsel.

Best regards,
Donica

****
Donica Thomas Varner
Assistant General Counsel
The University of Michigan
Office of the General Counsel
503 Thompson Street, 4010 Fleming Bldg.
Ann Arbor, Michigan 48109-1340
(734) 764-0304 or (734) 615-7954 (direct)
(734) 615-8937 (fax)
email: dvarner@umich.edu

EXHIBIT E

Andelman, Ethan

From: Harold J. Rose [harold.rose@yale.edu]
Sent: Thursday, August 17, 2006 9:39 AM
To: Greinert, Matthew
Subject: Ricoh v. Aeroflex

Dear Matt,

      Earlier today, I left you a voice mail explaining that Yale would not be able to comply with your subpoena within the unreasonably short deadline that you had set. Because this suit seems to be particularly contentious and a motion to quash has been filed, I feel that it is important to memorialize the voice mail that you left me this afternoon. You stated the following: "We did not expect that you would be able to comply with it by the deadline set. It was a discovery cut-off date, which is why we had to get the subpoena out the door." I appreciate your offer to work with Yale to identify the documents that you are looking for and to allow us to respond, if necessary, on a more reasonable schedule. Thank you very much. Harold Rose

_____

Harold Rose, Associate General Counsel
Yale University
PO Box 208255
New Haven, CT 06520-8255
Tel. (203) 432-4949; Fax (203) 432-7960

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EXHIBIT F

Massachusetts Institute of Technology   Richelle A. Nessralla   77 Massachusetts Avenue
                                        Associate Counsel   Cambridge, Massachusetts
                                                                     02139-4307
                        Office of Senior Counsel
                        Building 12 Room 090   Phone 617-452-5943
                                                                     Fax   617-258-0267
                                                                     Email ness@mit.edu

<u>**VIA FACSIMILE AND REGULAR MAIL**</u>

August 16, 2006

Matthew F. Greinert
Howrey
525 Market Street
Suite 3600
San Francisco, CA 94105-2708

MIT   Re: *Synopsys v. Ricoh Company, Ltd.,*
                  AND

                  Ricoh Company, Ltd. v. Aeroflex, Inc, et al.,
                  Subpoena for Records of the Massachusetts Institute of Technology

Dear Attorney Greinert:

        Enclosed please find the *Objection of the Massachusetts Institute of Technology to Subpoena Pursuant to Mass. R. Civ. P. 45(d)(1).*

        As required by the Family Education Rights and Privacy Act, 20 U.S.C. § 1232g(b)(2), MIT will be sending a notice to Dr. Papaefthymiou and will provide a reasonable notice period to him before producing any non-objectionable responsive documents we may have in our custody or control. Please contact me if you have any further questions related to this matter.

                                        Very truly yours,

                                        Richelle Nessralla

Enclosure

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

RICOH COMPANY, LTD, Plaintiff v. AEROFLEX, INCORPORATED, et al., Defendant.	))))))))))) Case No. C03-04669 MJJ (EMC) Northern District of California

OBJECTION OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY TO SUBPOENA PURSUANT TO FED. R. CIV. P. 45(c)

Pursuant to Fed. R. Civ. P. 45(c), the Massachusetts Institute of Technology ("MIT") respectfully objects to the subpoena served on it by Aeroflex, Inc., et al., on August 14, 2006 (the "subpoena") on the following grounds:

1.   The documents sought by the subpoena are ones that may constitute "education records" within the meaning of the Family Education Rights and Privacy Act, 20 U.S.C. § 1232g(b)(2), which MIT may not produce without proper service of a valid subpoena and without providing prior written notice of the subpoena to the individual or individuals to whom such documents relate with timely opportunity to object.

2.   The subpoena fails to allow reasonable time for compliance.

3.   The description in the subpoena of the documents required to be produced, without limitation of scope or time is so broad that the cost and effort required in locating, identifying, and producing the documents sought would be unreasonable and oppressive, would subject MIT to undue burden and expense, would require the disruption of the regular activities of MIT for an extended period of time, and would not

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lead to evidence admissible at trial or reasonably calculated to lead to the discovery of admissible evidence.

4.   The description in the subpoena of the documents required to be produced is vague and ambiguous and fails to describe the documents sought with reasonable particularity.

5.   The material sought in the subpoena may include documents that are subject to agreements with third parties to maintain the confidentiality of the documents to protect the trade secrets or other confidential research, development, or commercial information of third parties that are protected by Fed. R. Civ. P. 45(c)(3)(B)(i).

                                    MASSACHUSETTS INSTITUTE
                                    OF TECHNOLOGY

                                    By its attorney,

                                    _____
                                    Richelle Nessralla, Esq.
                                    BBO No. 640509
                                    Associate Counsel
                                    Massachusetts Institute of Technology
                                    77 Massachusetts Avenue, Bldg. 12-090
                                    Cambridge, Massachusetts 02139

Dated: August 16, 2006

                        CERTIFICATE OF SERVICE

I hereby certify that I caused a true copy of the above documents to be served upon Matthew F. Greinert, attorney of record for the defendant, by facsimile and regular mail on August 16 2006.

                    _____
                        Richelle Nessralla

                                2

OAO 88 (Rev. 1/94) Subpoena in a Civil Case

Issued by the
UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

RICOH COMPANY, LTD

V.

AEROFLEX, INCORPORATED, et al.

SUBPOENA IN A CIVIL CASE

Case Number: C03-04669 MJJ (EMC)
(Pending in the US District Court for the Northern District of California)

TO: JAMIE LEWIS KEITH, Esq., Senior Counsel on behalf of Massachusetts Institute of Technology
Office of the Senior Counsel, Room 7-206 & Room 12-090
77 Massachusetts Avenue, Cambridge, Massachusetts 02139

☐ YOU ARE COMMANDED to appear in the United States District court at the place, date, and time specified below to testify in the above case.

PLACE OF TESTIMONY	COURTROOM
	DATE AND TIME

☐ YOU ARE COMMANDED to appear at the place, date, and time specified below to testify at the taking of a deposition in the above case.

PLACE OF DEPOSITION	DATE AND TIME

☒ YOU ARE COMMANDED to produce and permit inspection and copying of the following documents or objects at the place, date, and time specified below (list documents or objects):
SEE ATTACHMENT A

PLACE WarRoom Document Solutions, attn: Errol Chin 274 Summer Street, 2nd Floor, Boston, Massachusetts 02210, (617) 426-6463	DATE AND TIME August 18, 2006, 10:00 a.m. EST

☐ YOU ARE COMMANDED to permit inspection of the following premises at the date and time specified below.

PREMISES	DATE AND TIME

Any organization not a party to this suit that is subpoenaed for the taking of a deposition shall designate one or more officers, directors, or managing agents, or other persons who consent to testify on its behalf, and may set forth, for each person designated, the matters on which the person will testify. Federal Rules of Civil Procedure, 30(b)(6).

ISSUING OFFICER'S SIGNATURE AND TITLE (INDICATE IF ATTORNEY FOR PLAINTIFF OR DEFENDANT) Attorney for Defendant	DATE August 14, 2006

ISSUING OFFICER'S NAME, ADDRESS AND PHONE NUMBER
Matthew F. Greinert, HOWREY LLP, 525 Market Street, Suite 3600, San Francisco, CA 94105; Telephone: (415) 848-4900

(See Rule 45, Federal Rules of Civil Procedure, Parts C & D on next page)

¹ If action is pending in district other than district of issuance, state district under case number.

American LegalNet, Inc.
www.USCourtForms.com

AO 88 (Rev 1/94) Subpoena in a Civil Case

PROOF OF SERVICE

	DATE		PLACE
SERVED:			

SERVED ON (PRINT NAME)		MANNER OF SERVICE

SERVED BY (PRINT NAME)		TITLE

DECLARATION OF SERVER

I declare under penalty of perjury under the laws of the United States of America that the foregoing information contained in the Proof of Service is true and correct.

Executed on _____
                    DATE

_____
SIGNATURE OF SERVER

_____
ADDRESS OF SERVER

Rule 45, Federal Rules of Civil Procedure, Parts C & D:

(c) PROTECTION OF PERSONS SUBJECT TO SUBPOENAS.

(1) A party or an attorney responsible for the issuance and service of a subpoena shall take reasonable steps to avoid imposing undue burden or expense on a person subject to that subpoena. The court on behalf of which the subpoena was issued shall enforce this duty and impose upon the party or attorney in breach of this duty an appropriate sanction which may include, but is not limited to, lost earnings and reasonable attorney's fee.

(2) (A) A person commanded to produce and permit inspection and copying of designated books, papers, documents or tangible things, or inspection of premises need not appear in person at the place of production or inspection unless commanded to appear for deposition, hearing or trial.

(B) Subject to paragraph (d) (2) of this rule, a person commanded to produce and permit inspection and copying may, within 14 days after service of subpoena or before the time specified for compliance if such time is less than 14 days after service, serve upon the party or attorney designated in the subpoena written objection to inspection or copying of any or all of the designated materials or of the premises. If objection is made, the party serving the subpoena shall not be entitled to inspect and copy materials or inspect the premises except pursuant to an order of the court by which the subpoena was issued. If objection has been made, the party serving the subpoena may, upon notice to the person commanded to produce, move at any time for an order to compel the production. Such an order to compel production shall protect any person who is not a party or an officer of a party from significant expense resulting from the inspection and copying commanded.

(3) (A) On timely motion, the court by which a subpoena was issued shall quash or modify the subpoena if it

(i) fails to allow reasonable time for compliance,

(ii) requires a person who is not a party or an officer of a party to travel to a place more than 100 miles from the place where that person resides, is employed or regularly transacts business in person, except that, subject to the provisions of clause (c) (3) (B) (iii) of this rule, such a person may in order to attend

trial be commanded to travel from any such place within the state in which the trial is held, or

(iii) requires disclosure of privileged or other protected matter and no exception or waiver applies, or

(iv) subjects a person to undue burden.

(B) If a subpoena

(i) requires disclosure of a trade secret or other confidential research, development, or commercial information, or

(ii) requires disclosure of an unretained expert's opinion or information not describing specific events or occurrences in dispute and resulting from the expert's study made not at the request of any party, or

(iii) requires a person who is not a party or an officer of a party to incur substantial expense to travel more than 100 miles to attend trial, the court may, to protect a person subject to or affected by the subpoena, quash or modify the subpoena, or, if the party in whose behalf the subpoena is issued shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship and assures that the person to whom the subpoena is addressed will be reasonably compensated, the court may order appearance or production only upon specified conditions.

(d) DUTIES IN RESPONDING TO SUBPOENA.

(1) A person responding to a subpoena to produce documents shall produce them as they are kept in the usual course of business or shall organize and label them to correspond with the categories in the demand.

(2) When information subject to a subpoena is withheld on a claim that it is privileged or subject to protection as trial preparation materials, the claim shall be made expressly and shall be supported by a description of the nature of the documents, communications, or things not produced that is sufficient to enable the demanding party to contest the claim.

ATTACHMENT A

Pursuant to Federal Rule of Civil Procedure 45 and as directed in the subpoena attached hereto, you are to produce all documents and things within the scope of the following definitions and descriptions that are within your possession, custody, or control. A Protective Order has been entered in this case by the United States District Court for the Northern District of California and is attached as Attachment B. Included in the Protective Order are provisions for the protection of confidential information produced by a third party. With respect to documents and things withheld under a claim of privilege, you are required under Rule 45 to describe the nature of the documents and things withheld in a manner sufficient to enable the demanding party to contest the claims.

DEFINITIONS

1.   The terms "you," and "your," mean, without limitation, Massachusetts Institute of Technology, including without limitation all of its subsidiaries, parents, departments and affiliates, and all past or present directors, officers, agents, representatives, employees, students, consultants, attorneys, entities acting in joint-venture or partnership relationships with Massachusetts Institute of Technology and others acting on behalf of Massachusetts Institute of Technology.

2.   As used herein, the word "document" means the original and each nonidentical copy of any written, printed, typed, recorded, computerized, electronic, taped, graphic, or other matter, in whatever form, whether in final or draft, including but not limited to all materials that constitute "writings," "recordings," "photographs," "source code" or "executable code" within the broadest meaning of Rule 1001 of the Federal Rules of Evidence and all materials that constitute "documents" within the broadest meaning of Rule 34 of the Federal Rules of Civil Procedure. The word "document" includes, without limitation, printed matter, electronic mail, materials stored on computer hard drives, diskettes, tapes, any other computer media, and any other information stored magnetically, optically or in any electronic medium and/or form.

3.   As used herein, "person" means any individual, firm, partnership, corporation, proprietorship, association, governmental body, or any other organization or entity.

4.   As used herein, "communication" includes, without limitation, communications by whatever means transmitted (i.e., whether oral, written, electronic or other methods used), as well as any note, memorandum or other record thereof.

5.   The terms "regarding, referring or relating to" and "concerning" mean reflecting, concerning, containing, pertaining, referring, relating to, indicating, showing, describing, evidencing, discussing, mentioning, embodying or computing.

6.   Whenever the singular is used, it shall also be taken to include the plural, and vice versa. Whenever the conjunctive is used, it shall also be taken to include the disjunctive, and vice versa.

INSTRUCTIONS

The following instructions apply to each of the requests for documents set forth herein:

1.   Please produce entire documents, including, but not limited to, attachments, enclosures, cover letters, memoranda, and appendices.

2.   Pursuant to Rule 26(c) of the Federal Rules of Civil Procedure, these requests for documents shall be deemed continuous up to and following the trial of this proceeding such that any documents or things requested herein which is either discovered by you or comes within your possession, custody or control subsequent to your initial responses hereto but prior to the final conclusion of this case should be produced in a supplemental response to these Document Requests immediately upon its discovery or receipt by you or your counsel.

3.   If any document is withheld under a claim of privilege, in order that the Court and the parties may determine the validity of the claim of privilege, please provide a privilege log identifying each document withheld, including

    a.   The type of document;

    b.   The approximate date, and manner of recording, creating or otherwise preparing the document;

    c.   The subject matter of the document;

d.   The name and organizational position of the person(s) who produced the document,

e.   The name and organizational position of the person(s) who received a copy of the document, or to whom the document was disclosed; and

f.   The claimed grounds on which the document is being withheld and facts sufficient to show the basis for each claim of privilege.

4.   If you object to any part of a request for documents and refuse to produce documents responsive to that part, state your objection and respond to the remaining portion of that request. If you object to the scope or time period of a request for documents, state your objection and respond to the request for documents for the scope or time period you believe is appropriate.

5.   Please produce all documents in the order in which they are kept in the ordinary course of business, and in their original file folders, binders, covers or containers, or facsimile thereof.

6.   Any document bearing any changes, including, but not limited to, markings, handwritten notation, or other differences, that are not a part of the original text, or any reproduction thereof, is to be considered a separate document for purposes of responding to the following document requests. English translations of partial translations of foreign language documents should also be considered separate documents.

7.   If a requested document is in a language other than English, please produce both the original and any existing English translation thereof.

8.   If any of the following requests for documents cannot be responded to in full after exercising due diligence to secure the requested documents, please so state and respond to the extent possible, specifying your inability to respond to the remainder and stating whatever information you have regarding, referring or relating to the unanswered portions. If your response is qualified in any particular manner, set forth the details of such qualification.

9.   Please produce hard copies of electronic records or produce computerized information in an intelligible format with a description of the system from which it was derived sufficient to permit rendering the materials intelligible.

DOCUMENT REQUESTS

Request No. 1:

All documents regarding, referring or relating to Dr. Marios Papaefthymiou's teaching of a course titled "Parallel Algorithms and Architectures" in the Electrical Engineering and Computer Science Department at Massachusetts Institute of Technology, including but not limited to, course syllabi, handouts, outlines, digests, lecture notes, presentations, computer code, and demonstrative software and hardware created for the course.

Request No. 2:

All documents regarding, referring or relating to Dr. Marios Papaefthymiou's teaching of a course titled "Advanced Algorithms" in the Electrical Engineering and Computer Science Department at Massachusetts Institute of Technology, including but not limited to, course syllabi, handouts, outlines, digests, lecture notes, presentations, computer code, and demonstrative software and hardware created for the course.

Request No. 3:

All documents regarding, referring or relating to Dr. Marios Papaefthymiou's teaching of any course within the Electrical Engineering and Computer Science Department, or any other Department, at Massachusetts Institute of Technology, including but not limited to, course syllabi, handouts, outlines, digests, lecture notes, presentations, computer code, and demonstrative software and hardware created for any such course.

Request No. 4:

All documents regarding, referring or relating to theses authored by Dr. Marios Papefthymiou, including but not limited to, MIT Laboratory for Computer Science Technical Reports TR-605 and TR-486, and any other technical bulletins or reports authored by Dr. Papaefthymious while he was a student at Massachusetts Institute of Technology.

ATTACHMENT B

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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

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SYNOPSYS, INC.,

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14   Plaintiff,

15   vs.

RICOH COMPANY, LTD.,

16

17   Defendant.

CASE NO. C03-02289-MJJ (EMC)

STIPULATED PROTECTIVE ORDER

18

19   1.   All Confidential Information produced or exchanged in the course of this litigation shall be used solely for the purpose of preparation and trial of this litigation and for no other purpose

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whatsoever, and shall not be disclosed to any person except in accordance with the terms hereof.

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22   2.   "Confidential Information," as used herein, means any information of any type, kind or

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character that is designated as "Confidential" by any of the supplying or receiving parties, whether it be

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a document, information contained in a document, information revealed during a deposition,

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information revealed in an interrogatory answer or otherwise. In designating information as

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"Confidential," a party will make such designation only as to that information that it in good faith

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believes contains "Confidential Information."

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3.   (a) "Confidential Information" includes, but is not limited to, (i) proprietary technical

information and specifications, (ii) trade secrets (iii) confidential know-how, and (iv) proprietary business and financial information and any other non-public information, the disclosure of which is likely to have the effect of causing significant competitive harm to the disclosing party or party from which the information was obtained. Nothing in this paragraph shall be construed to limit the description of "Confidential Information" set forth in paragraph 2.

(b) Nothing shall be regarded as "Confidential Information" if it is information that

(i) is in the public domain at the time of disclosure, as evidenced by a written document;

(ii) becomes part of the public domain through no fault of the other party, as evidenced by a written document;

(iii) was in the receiving party's rightful and lawful possession at the time of disclosure, as evidenced by a written document; or

(iv) is lawfully received by the receiving party from a third party at a later date without restriction as to disclosure, provided such third party has the right to make the disclosure to the receiving party.

4. "Qualified Persons," as used herein means:

(a) To the Court and its officers and staff, including court reporters;

(b) Outside attorneys of record for the parties in this litigation and employees of such attorneys to whom it is necessary that the material be shown for purposes of this litigation;

(c) Outside experts, consultants, advisors or investigators (collectively referred to hereafter as "experts") who have signed an undertaking pursuant to paragraph 5 but only after compliance with the provisions of paragraph 5 below;

(d) To non-party support services including, but not limited to, court reporters, outside copy services, document imaging and database services, design services who have signed confidentiality agreements, jury consultants who have signed confidentiality agreements, mock jurors who have signed confidentiality agreements, and language translators who have signed confidentiality agreements

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(including support staff) as may be reasonably necessary in connection with the preparation or conduct

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of this action;

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5   (e) Anyone to whom the parties consent in writing; and

6   (f) If this Court so elects, any other person may be designated as a Qualified Person by

order of this Court, after notice and opportunity to be heard to all parties.

8   5. Prior to the disclosure of any "Confidential Information" to any expert under Paragraph

4(c), counsel for the Party seeking to make the disclosure shall: (i) deliver a copy of this Protective

Order 10 entered to such person, explain its terms to such person, and secure the signature of such

11 person on a written undertaking in the form attached hereto as Exhibit A, and (ii) transmit by facsimile

and mail to counsel for the other Parties a copy of the signed Exhibit A, accompanied by a curriculum

13 vitae, at least ten (10) calendar days before any "Confidential Information" designated under this

14 Protective Order is to be disclosed to the signator. The curriculum vitae should identify the general

15 area(s) of expertise of the expert, provide a brief job history, specify all employment, expert or

16 consulting engagements by the expert within the past five (5) years, and state all present or prior

17 relationships between the expert and any entity directly or indirectly involved in this litigation or

18 providing an indemnity to any such entity, its subsidiaries or its affiliates. Any Party may object to the

proposed disclosure to an expert within the ten (10) calendar day period following the transmittal of

Exhibit A and the curriculum vitae, by stating specifically in writing the reasons why the Party believes

such expert should not receive designated "Confidential Information." If during that ten (10) calendar

23 day period a Party makes such a written objection, there shall be no disclosure of "Confidential

24 Information" to the expert absent mutual agreement of the Parties, waiver of the objection as stated

25 below, or further order of the Court. After a Party objects to the proposed disclosure to an expert, the

26 objecting Party shall move, by noticed motion or by ex parte application, for an order that disclosure not

27 be made to such expert within five (5) business days following the date that the objection is made, or the

28 Party's objection shall be deemed waived and disclosure may be made to the expert. The burden shall

[PROPOSED] STIPULATED PROTECTIVE ORDER   3
CASE NO. C03-2289 MJJ (EMC)

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be on the objecting Party to establish why the disclosure should not be made. Each Party shall maintain
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a file of all such signed copies of Exhibit A. However, it shall not be necessary for administrative,
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secretarial or clerical personnel working for such Qualified Person to sign a written undertaking.

6   6. - (a) Documents produced in this action may be designated by any party or parties as
"Confidential" by marking each page of the document(s) with the designation "Confidential."

8   (b) In lieu of marking the original of a document, if the original is not produced, the
designating party may mark the copies that are produced or exchanged. Originals shall be preserved for
inspection.
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(c). If the document is not in paper form, the producing person or entity shall use other
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such reasonable means as necessary to identify clearly the document or information as "Confidential."
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7. Discovery responses or other litigation materials may be designated by any party or
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parties as "Confidential" by marking each page of the response with the designation "Confidential."
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16   8. The designation of information disclosed during a deposition as "Confidential" shall be
made either by a statement on the record at the deposition or within twenty (20) calendar days after
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receipt by counsel of a copy of the deposition transcript. Such designation will be applied to only those
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portions of the deposition transcript that include a specific question and response or series of questions
and responses containing "Confidential Information." The deposition transcript shall be printed in
consecutive pages (whether or not some pages are designated as "Confidential") with a marking on the
cover of the deposition transcript indicating the "Confidential" designation contained therein. Unless
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previously designated otherwise, all deposition transcripts shall be treated as "Confidential" in their
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entirety prior to the end of the twenty (20) calendar day period following receipt by counsel of a copy of
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the deposition transcript.
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9. "Confidential Information" shall not be disclosed or made available by the receiving
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party to persons other than Qualified Persons except that nothing herein is intended to prevent
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individuals who are in-house counsel or a member of the professional legal department of the Parties

[PROPOSED] STIPULATED PROTECTIVE ORDER   4
CASE NO. C03-2189 MJJ (EMC)

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from having access to pleadings, briefs and exhibits or declarations filed with the Court and expert

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reports, including exhibits that are designated as "Confidential."

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5   10. (a) Documents to be inspected shall be treated as "Confidential" although such

documents need not be marked as "Confidential" prior to inspection. At the time of copying for the

receiving parties, any documents containing "Confidential Information" shall be stamped prominently

"Confidential" by the producing party.

9   (b) Nothing herein shall prevent disclosure beyond the terms of this Order if each party

designating the information as "Confidential" consents to such disclosure or if the Court, after notice to

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all effected parties, orders such disclosures. Nothing herein shall prevent any counsel of record from

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utilizing "Confidential Information" in the examination or cross- examination of any person who is

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indicated on the document as being an author, source or recipient of the "Confidential Information,"

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irrespective of which party produced such information. Nothing herein shall prevent any counsel of

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record from utilizing "Confidential Information" in the examination or cross-examination of any person

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who is a current or former officer, director or employee of the party so designating the information as

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"Confidential" or of the party that produced the information or of a related entity.

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19   11. If a party inadvertently discloses any document or thing containing information that it

deems confidential without designating it as "Confidential," the disclosing party shall promptly upon

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discovery of such inadvertent disclosure inform the receiving party in writing, and the receiving party

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and all Qualified Persons possessing such information shall thereafter treat the information as

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"Confidential" under this Order. To the extent such information may have been disclosed to persons

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other than Qualified Persons described in this document, the receiving party shall make every

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reasonable effort to retrieve the information promptly from such persons and to avoid any further

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disclosure to and by such persons.

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27   12. A party shall not be obligated to challenge the propriety of a designation as

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"Confidential" at the time made, and a failure to do so shall not preclude a subsequent challenge thereto.

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Nor will the failure to object be construed as an admission that any particular "Confidential

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Information" contains or reflects currently valuable trade secrets or confidential commercial

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information. In the event that any party to this litigation disagrees at any stage of these proceedings

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with the designation by the designating party of any information as "Confidential," or the designation of

any person as a Qualified Person, the parties shall first try to resolve such dispute in good faith on an

informal basis, such as production of redacted copies. If the parties are unsuccessful in informally

resolving any disputes regarding the designation of any document or information as "Confidential," the

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Court shall resolve all such disputes. It shall be the burden of the party making any designation to

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establish that the information so designated is "Confidential" within the meaning of this Protective

Order. 12 The "Confidential Information" that is the subject of the dispute shall be treated as originally

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designated pending resolution of the dispute.

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        13. The parties may, by written stipulation filed and approved by the Court, amend this

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Order, and any party may seek an order of this Court modifying this Protective Order. The parties agree

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to meet and confer prior to seeking to modify this Protective Order. In addition, the Court may modify

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this Protective Order in the interest of justice or otherwise at the Court's discretion.

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    19   14. In the event a party wishes to use any "Confidential Information" in any affidavits,

briefs, memoranda of law, or other papers filed with the Court in this litigation, such "Confidential

Information" used therein shall be filed under seal with the Court. In addition to placing documents in a

sealed envelope with instructions that the document is filed pursuant to the Stipulated Protective Order

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and that the envelope is not to be opened absent further order of the Court, the envelope should be

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labeled to identify the title of the case, the case number, and the title of the document.

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        15. The Clerk of this Court is directed to maintain under seal all documents and transcripts of

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deposition testimony and answers to interrogatories, admissions and other pleadings filed under seal

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with the Court in this litigation that have been designated, in whole or in part, as "Confidential" by a

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party to this action.

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3   16. If a Party intends to offer into evidence or otherwise disclose in open court any
"Confidential Information" designated by another person or entity, counsel for such Party shall notify
the designating person or entity that the Party intends to disclose "Confidential Information" in open
court prior to the disclosure, so that the designating person or entity may confer with the Court
concerning appropriate procedures for protecting its "Confidential Information."

8   17. In the event any person or party that has possession, custody, or control of any
information designated as "Confidential" pursuant to the terms of this Protective Order receives a
subpoena or other process or order to produce such information, such person or party shall notify by
mail within five (5) business days of the Party's receipt of the request, the counsel for the party or
persons claiming confidential treatment of the documents sought by such subpoena or other process or
order, shall furnish such counsel with a copy of said subpoena or other process or order, and shall
cooperate with respect to any procedure sought to be pursued by the party whose interests may be
affected. The party asserting the "Confidential" treatment shall have the burden of defending against
such subpoena, process or order. The person or party receiving the subpoena or process or order shall
be entitled to comply with it except: (a) to the extent the party asserting the "Confidential" treatment is
successful in obtaining an order modifying or quashing it; and (b) in complying with the process or
order shall, at a minimum, seek to obtain "Confidential" treatment of the "Confidential Information"
before producing it in the other proceeding or action.

22   18. If the discovery process calls for the production of information that a Party or Non-Party
does not wish to produce because the Party or Non-Party believes its disclosure would breach an
agreement with another person or entity to maintain such information in confidence, the disclosing Party
or Non-Party promptly shall give written notice to the other person or entity that its information is
subject to discovery in this litigation, and shall provide such person or entity with a copy of this
Protective Order. When such written notice is given to the person or entity, the disclosing Party or Non-
Party will advise the potential receiving Party that such notice has been given. The person or entity

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whose information may be subject to discovery shall have ten (10) business days from receipt of the

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written notice in which to seek relief from the Court, if the person or entity so desires. If the ten (10)

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business days elapse without the person or entity seeking relief from the Court, the requested

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information shall be produced in accordance with the terms of this Protective Order.

7   19. In the event that additional persons or entities become Parties, none of such Parties'

counsel, experts or consultants retained to assist said counsel, shall have access to "Confidential

Information" produced by or obtained from any other producing person or entity until said Party has

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executed and filed with the Court its agreement to be fully bound by this Protective Order.

11   20. This Protective Order shall apply to the parties and any non-party from whom discovery

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may be sought and who desires protection for the discovery sought. Thus, any non-party requested or

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required to produce or disclose information in this proceeding, through subpoena or otherwise, may

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designate such information pursuant to the terms of this Protective Order.

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16   21. (a) Nothing herein requires disclosure of information, documents or things which the

disclosing entity contends is protected from disclosure by the attorney-client privilege or the work-

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product exception. Nothing herein shall preclude any party from moving this Court for an order

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directing the disclosure of such information, documents or things.

20   (b) In the event that any privileged attorney-client or work product documents or things

are inadvertently produced for inspection and/or provided, the disclosing party shall identify such

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documents or things within five (5) days of when it discovers that the privileged materials were

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inadvertently produced for inspection and/or provided, and either (1) copies shall not be provided, or (2)

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if copies have already been provided, all copies in the receiving party's possession shall be promptly

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returned (and not relied upon) by the receiving party. Nothing in this paragraph shall prevent the

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receiving party from contending that the identified materials are not privileged, that the material was not

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inadvertently produced, or that privilege was waived for reasons other than mere inadvertent production

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of the material.

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3   22. Within ninety (90) days after conclusion of this litigation and any and all appeals thereof,

4 any document and all reproductions of "Confidential" documents produced by a party that are in the

possession of any Qualified Person shall be returned to the producing party or, with the consent of the

producing party, destroyed. If destroyed, counsel for the receiving party shall certify to counsel for the

producing party compliance with this paragraph within fourteen (14) calendar days of such destruction.

Outside counsel for each party may maintain in its files one copy of all material produced as well as all

materials filed with or otherwise presented to the Court, deposition and trial transcripts, and work

10 product (regardless of whether such materials contain or refer to "Confidential" materials). If counsel

11 retains such materials, the materials which contain Confidential Information shall be accessible only by

12 Qualified Persons defined in paragraph 4(b) above. As far as the provisions of any protective orders

13 entered in this action restrict the communication and use of the documents produced thereunder, such

14 orders shall continue to be binding after the conclusion of this litigation including any subsequent

15 appeals or later proceedings, except that (a) there shall be no restriction on documents that are used as

16 exhibits in Court unless such exhibits were filed under seal, and (b) a party may seek the written

17 permission of the producing party or order of the Court with respect to dissolution or modification of

18 such protective orders. The Court shall retain jurisdiction to enforce the performance of said obligations.

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23. 23.   (a)   At the election of the Producing Party, a Receiving Party's access to a Producing

Party's discoverable source code may be limited to inspection of the code at a secured facility provided

by the Producing Party. Such inspection may be conducted only by persons identified in advance by the

Receiving Party on a list of "Qualified Inspecting Personnel" which may include:

25   (1)   the Receiving Party's Outside Counsel of record in this action; and

26   (2)   up to three Experts (as defined in this Order) of the Receiving Party to

27 whom disclosure is reasonably necessary for this litigation and who have signed the

28 "Agreement to Be Bound by Protective Order (Exhibit A) and who have been approved

pursuant to the "Procedures for Approving Disclosure of 'CONFIDENTIAL' information

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of Items to "Experts" as set forth in paragraph 5.

(h)   The following provisions relate to Synopsys' provision of access to the Source Code for versions of its commercial products:

(1)   Synopsys will make available a closed room at its facility in Bethesda, Maryland for use by Ricoh's Qualified Inspecting Personnel. The room will be set aside for the exclusive use of Ricoh's Qualified Inspecting Personnel and will not be used by Synopsys or any other party when Ricoh's Qualified Inspecting Personnel are not present. The room will be available for a minimum of twelve weeks. After twelve weeks, and after consultation with Ricoh, Synopsys may close the facility pursuant to the procedures described in paragraph 4 below. If the facility is closed, Synopsys agrees to make the source code available for inspection under similar procedures at another date prior to the close of expert discovery.

(2)   Synopsys will equip the closed room with a private phone if a phone jack is already available in the room, a stand-alone, non-networked, computer and high-speed printer. The computer will be loaded with copies of the source code to be produced and used by Synopsys and no notes, comments, or any segments shall be removed before being made available. The computer will be equipped with the text editors available in a standard Unix distribution, suitable for use in editing the source code. Synopsys will assist Ricoh in loading software that Ricoh may require for analysis of the source code. The computer shall also be loaded with a complete distribution of the Synopsys software that is fully operable and executable.

(3)   Ricoh may print copies of a reasonable subset of the source code for the Synopsys products at issue. Any printing done at the secure facility will be done exclusively on paper supplied by Synopsys. Synopsys may elect to place preprinted confidential designations on the margins of the paper. Ricoh's Qualified Inspecting Personnel are not to bring blank paper into the closed room except for the purpose of making handwritten notes. Synopsys will initially supply Ricoh with 5,000 pages of paper for use with the printer. This figure is based on the estimate that 5,000 pages should be sufficient to print approximately 5% of the source code for Design Compiler. If at any time, Ricoh believes that additional printing and paper is required, Ricoh may submit additional requests for paper to Synopsys with a general statement of the basis of the request. Synopsys will respond within one week to any such request. If the parties

are unable to come to agreement after confecral, the matter may be presented to the Court. In evaluating requests for paper, the relevant standard to be applied is that Ricoh should be allowed to print hardcopies of a reasonable subset of the Synopsys source code and that what is reasonable shall be evaluated in light of relevance of the code to Ricoh's allegations and Synopsys' interest in preventing release in hardcopy of more than a fraction of its source code.

(4) Ricoh will be permitted to send individuals from the list of Qualified Inspecting Personnel to participate in and/or witness the closing of the secured facility. Before closing of the facility, Ricoh's representatives may provide a list of procedures that they wish to perform to ensure that any electronic record of their use of the machine has been erased.

(c) The Receiving Party will provide the Producing Party with a copy of its list of "Qualified Inspecting Personnel" no later than 5 business days before any person on the list attempts to access the secured facility. The Receiving Party may revise the list to add or remove individuals, provided that no more than a total of three Experts are ever provided with access to the source code during the entire course of the litigation absent an agreement by the parties or a Court Order to expand this number.

(d) Any notes taken or any other information created by Outside Counsel or the experts of the Receiving Party at or based on any inspection of the source code shall be treated as "CONFIDENTIAL" under this Protective Order.

24. This Order shall not bar any attorney herein in the course of rendering advice to his client with respect to this litigation from conveying to any party client his evaluation in a general way of "Confidential Information" produced or exchanged herein; provided, however, that in rendering such advice and otherwise communicating with his client, the attorney shall not disclose the specific contents of any "Confidential Information" produced by another party herein, which disclosure would be contrary to the terms of this Protective Order.

25. The Court shall retain jurisdiction to enforce the terms of this order for six (6) months after the final termination of this action.

Dated: March 23, 2004

HOWREY SIMON ARNOLD & WHITE, LLP

/s/ Christopher L. Kelley
Teresa M. Corbin, Esq.

[PROPOSED] STIPULATED PROTECTIVE ORDER   11
CASE NO. C03-2289 MJJ (EMC)

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2

3   Christopher Kelley, Esq.
           Erik K. Moller, Esq.
4   Attorneys for Plaintiff SYNOPSYS, INC.
           301 Ravenswood Avenue
5   Menlo Park, CA 94025
─   Telephone: (650) 463-8100
6   Facsimile: (650) 463-8400

7
Dated: March 23, 2004
8   DICKSTEIN SHAPIRO MORIN & OSHINSKY, LLP

9   /s/ Kenneth W. Brothers
                         Kenneth W. Brothers, Esq. (pro hac vice)
10   Attorneys for Defendant RICOH COMPANY, LTD.
                         2101 L Street NW
11   Washington, DC 20037
                         Telephone: (202) 785-9700
12   Facsimile: (202) 887-0689

13

14   ORDER

15
   SO ORDERED this 24th day of March, 2004.
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18   _____/s/_____
                          Magistrate Judge Edward M. Chen

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SENIOR COUNSEL'S OFFICE/INSURANCE OFFICE

FACSIMILE TRANSMITTAL SHEET

TO: Matthew F. Greinert	FROM: Richelle A. Nessralla Associate Counsel Massachusetts Institute of Technology 77 Massachusetts Avenue, Bldg. 12-090 Cambridge, MA 02139 Phone No.: (617) 452-5943 Fax No.: (617) 258-0267 Email: rness@mit.edu
COMPANY: Howrey	DATE: 8/16/06
FAX NUMBER: 415-848-4999	NO. OF PAGES INCLUDING COVER: 24
PHONE: 415-848-3219	HARD COPY __x__ WILL ____ WILL NOT FOLLOW
RE: Ricoh Company, Ltd. v. Aeroflex, Inc, et al. Subpoena for Records of the Massachusetts Institute of Technology	

If you have any problems with this transmission, please contact Richelle Nessralla at the above number.

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Massachusetts Institute of Technology   Richelle A. Nessralla
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VIA FACSIMILE AND REGULAR MAIL

August 18, 2006

Matthew F. Greinert
Howrey
525 Market Street
Suite 3600
San Francisco, CA 94105-2708

Re: *Synopsys v. Ricoh Company, Ltd./Ricoh Company, Ltd. v. Aeroflex, Inc, et al.,*
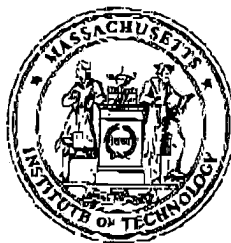*Subpoena for Records of the Massachusetts Institute of Technology*

Dear Attorney Greinert:

MIT has received notice of Ricoh Company, Ltd.'s Motions to Quash subpoenas
filed with the court on August 16, 2006. These motions pertain to the subpoena served on
MIT on August 14, 2006 in the above referenced matters. As a result, MIT will not be
responding to the subpoena until the court has ruled on these motions. Please feel free to
contact me should you have any questions or concerns.

Very truly yours,

Richelle Nessralla

SENIOR COUNSEL'S OFFICE/INSURANCE OFFICE

FACSIMILE TRANSMITTAL SHEET

TO: Matthew F. Greinert	FROM: Richelle A. Nessralla Associate Counsel Massachusetts Institute of Technology 77 Massachusetts Avenue, Bldg. 12-090 Cambridge, MA 02139 Phone No.: (617) 452-5943 Fax No.: (617) 258-0267 Email: rness@mit.edu
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